

# warka 28 duza

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **17**
- SRM **3.5**
- Style **Bohemian Pilsener**

## Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.4 liter(s)**
- Total mash volume **21.8 liter(s)**

## Steps

- Temp **63 C**, Time **30 min**
- Temp **72 C**, Time **40 min**

## Mash step by step

- Heat up **16.4 liter(s)** of strike water to **70.1C**
- Add grains
- Keep mash **30 min** at **63C**
- Keep mash **40 min** at **72C**
- Sparge using **18.1 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	hook head -pilsner	3.7 kg (67.9%)	80 %	3.5
Grain	Briess - Wheat Malt, White	0.25 kg (4.6%)	85 %	5
Grain	best pale ale	1 kg (18.3%)	80 %	6
Grain	carmel malt	0.25 kg (4.6%)	80 %	3
Grain	Oats, Flaked	0.25 kg (4.6%)	80 %	2

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Saaz (USA)	40 g	40 min	3.75 %
Boil	Mosaic	20 g	5 min	11.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	100 ml	Fermentis

## Notes

- po gotowaniu wyszło 1048-12blg  
*Oct 13, 2018, 8:12 PM*